

# Proposal For Pro-Rated Spring Rise with Lower Elevation Stop Protocols

Cheyenne River Sioux Tribe, Three Affiliated Tribes, Trenton,  
Standing Rock Sioux Tribe, North Dakota, South Dakota, Montana

# Stop Protocol – Upper

- 58.5 MAF at March 31<sup>st</sup> for flood control
- Additional Constraints for >58.5MAF with Above Median Runoff as of May 1<sup>st</sup> based on rainfall predictions in Lower Basin

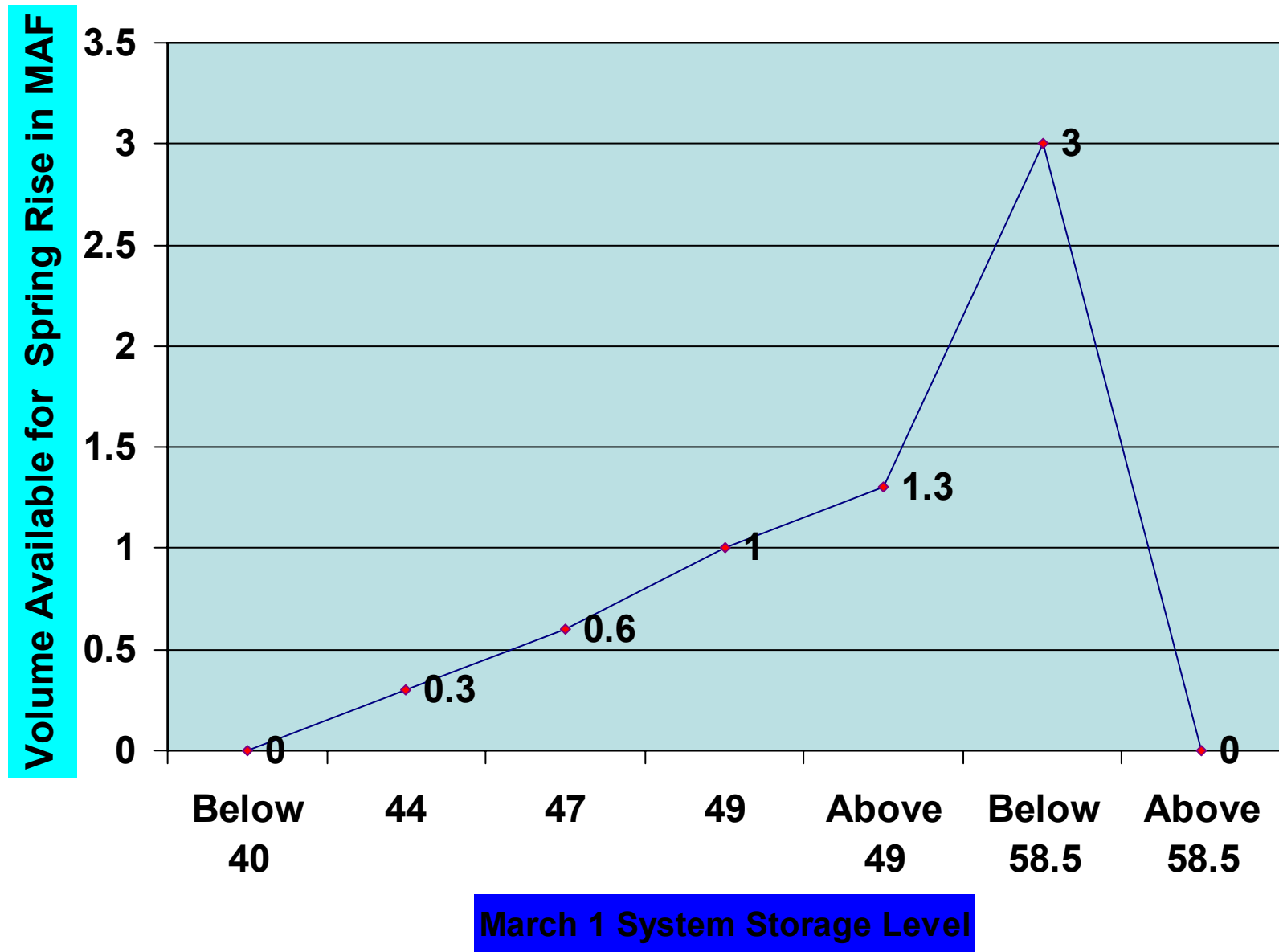
# Stop Protocol – Lower

- Less than 40 MAF as of March 1 = STOP PROTOCOL - No First or Second Rise (only occurs 10% of the time)
- Between 40 MAF and 49 MAF as of March 1, then have a prorated rise, dependent on MAF in storage and runoff predictions as of May 1<sup>st</sup> as follows:

# Pro-Rated Rise Proposal for Discussion

Measured on March 1				
Upper Preclude	58.5MAF			None
				<b>NO RISE</b>
High Volume	Above 50 MAF	Above Upper Quartile	150% of 1.3 MAF	Increasing to 3 MAF
Spring Rise		Median to Upper		1.3 MAF
		Lower to Median	50% of 1.3 MAF	Decreasing to .65 MAF
		Below Lower Quartile		
Upper Middle Rise	47-50	Above Upper Quartile	150% of 1 MAF	Increasing to 1.5 MAF
		Median to Upper		1 MAF
		Lower to Median	50% of 1.1 MAF	Decreasing to .50 MAF
		Below Lower Quartile		
Lower Middle Rise	47-44 MAF	Above Upper Quartile	150% of .6 MAF	Increasing to .9 MAF
		Median to Upper		.6 MAF
		Lower to Median	50% of .6 MAF	Decreasing to .3 MAF
		Below Lower Quartile		<b>NO RISE</b>
Low Rise	44-40F	Above Upper Quartile	150% of .3 MAF	Increasing to .45 MAF
		Median to Upper		.3 MAF
		Lower to Median	50% of .3MAF	Decreasing to .15 MAF
		Below Lower Quartile		<b>NO RISE</b>
Lower Preclude	40 MAF			<b>NO RISE</b>

# Sample Pro-Rated Spring Rise



# Impacts at Elevations/ Storage Levels

Reservoir			Elevation		MAF
	Interest at Stake	#Intakes Affected	Timing of Release Issues	Problem Starts At	
<b>Ft. Peck</b>	Intakes	No Problem			
	Critical Cult. Sites			2205	44 MAF
	New Cult. Site Exposure			2218	40 MAF
	Ft. Peck Spring Rise			2230	53 MAF
	Spawning Needs		Not May 1-June 30	Need 3 ft Rise	
<b>Garrison</b>	Water Qual. -2			1825	47 MAF
	Intakes	11,403 people - 6 intakes		1816	40 MAF
	Critical Cult. Sites			1825	47 MAF
	New Cult. Site Exposure			1818	43 MAF
	Spawning Needs		Not April 14-May 31	1830	50 MAF
<b>Oahe</b>	Intakes	1 - 14,000 People - Mni Waste'		1580	40 MAF
	Critical Cult. Sites			1591	44 MAF
	New Cult. Site Exposure			1580	40 MAF
	Spawning Needs		Not April 7-May 31	1590	44 MAF
<b>Big Bend</b>	Intakes	2 Intakes		1421	NA
	Critical Cult. Sites			1419	NA
	New Cult. Site Exposure			1419	NA
	Spawning Needs			1419	NA
<b>Ft. Randall</b>	Intakes	5 from 1340-1316		1340	
	Critical Cult. Sites				
	New Cult. Site Exposure				
	Spawning Needs				